Listing of Claims:

This listing of claims will replace all prior versions, and listings of claims in the

application:

What is claimed is:

Claim 1. (Canceled)

Claim 2. (Currently amended) A method according to claim [[1]] 6, wherein the first and

second two-dimensional spaces are regarded as a first image and a second image,

respectively, and the matching is computed pixel by pixel based on correspondence

between a critical point detected through a two-dimensional search on the first image

and a critical point detected through a two-dimensional search on the second image.

Claim 3. (Original) A method according to claim 2, further comprising:

multiresolutionalizing the first image and the second image by respectively

extracting the critical points;

performing a pixel-by-pixel matching computation on the first image and the

second image at the same multi-resolution level; and

acquiring a pixel-by-pixel correspondence relation at a finer level of resolution

while inheriting a result of the pixel-by-pixel matching computation from a matching

computation at a different multiresolution level.

Claim 4. (Canceled)

Claim 5. (Currently amended) A method according to claim 6 [[4]], further comprising:

displaying the virtual intermediate two-dimensional space.

Claim 6. (Currently amended) A method according to claim 4, A multivariate space

processing method, comprising:

degenerating multivariate data into three predetermined variates;

determining a reference variate to serve as a reference among the three variates;

acquiring a first two-dimensional space formed by the remaining two variates

when the reference variate takes a first value;

acquiring a second two-dimensional space formed by the remaining two variates

when the reference variate takes a second value; [[and]]

computing a matching between the first two-dimensional space and the second

two-dimensional space;

generating a virtual intermediate two-dimensional space based on the first two-

dimensional space and the second two-dimensional space by performing an

interpolation computation based on a result of said matching computation; and

comparing [[a]] the virtual intermediate two-dimensional space obtained from the

matching computation and an authentic intermediate two-dimensional space obtained

based on a predetermined value of the multivariate data.

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Claim 7. (Original) A method according to claim 6, wherein the virtual intermediate two-dimensional space and the authentic intermediate two-dimensional space are compared while changing the predetermined variates.

Claim 8. (Original) A method according to claim 6, wherein the virtual intermediate two-dimensional space and the authentic intermediate two-dimensional space are compared while changing the selection of the reference variate.

Claim 9. (Original) A method according to claim 6, wherein the virtual intermediate two-dimensional space and the authentic intermediate two-dimensional space are compared while changing the first value and the second value.

Claim 10. (Original) A method according to claim 6, wherein the virtual intermediate two-dimensional space and the authentic intermediate two-dimensional space are compared after a predetermined conversion is performed on the first and second two-dimensional spaces.

Claim 11-22. (Canceled)

Claim 23. (Currently amended) A computer ~~program~~ readable medium containing computer executable ~~by a computer~~ code, such that when the code is executed by a computer, the code causes the computer to perform ~~the program comprising~~ the functions of:

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degenerating multivariate data into three predetermined variates;

determining a reference variate to serve as a reference among the three variates:

acquiring a first two-dimensional space formed by the remaining two variates when the reference variate takes a first value;

acquiring a second two-dimensional space formed by the remaining two variates when the reference variate takes a second value; [[and]]

computing a matching between the first tow-dimensional space and the second two-dimensional space[[.]] ;

generating a virtual intermediate two-dimensional space based on the first two-dimensional space and the second two-dimensional space by performing an interpolation computation based on a result of said matching computation; and

comparing the virtual intermediate two-dimensional space and an authentic intermediate two-dimensional space obtained based on a predetermined value of the multivariate data.

Claim 24. (Canceled)